

REMARKS

Claims 1-28 are pending in the application. By this Amendment, claims 1-5, 7, 8, 10, 11, and 14 have been amended and claims 20-28 have been added to provide an additional measure of protection for the invention. No new matter has been added, as support for the claims can be found throughout the specification including original claims and the drawings.

Reconsideration of the application is respectfully requested for the following reasons.

The Examiner indicated that claim 9 "would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims" on page 4 of the Office Action. However, for at least the reasons set forth below, Applicant respectfully submits that all pending claims are in condition for allowance.

The Office Action objects to claim 8. Applicant respectfully traverses the objection. In claim 8, the decoding/restoring step performs the function of "adding." See Fig. 4B. On the contrary, the compressing/coding step performs the function of "subtracting." See Fig. 3B. Therefore, the word "adding" of claim 8, which relates to the decoding/restoring step, is correct and withdrawal of the objection is respectfully requested.

Applicant further notes that several clarifying amendments have been made to claim 8, i.e., claim 8 now recites "outputting a first representative value from a coding table corresponding to a higher value of the relatively low frequency component and a second representative value from a coding table corresponding to the relatively high frequency component." New claim 20 has been to recite: adding the first representative value to a lower

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Reply to Office Action of December 22, 2003

value of the relatively low frequency component; and restoring the received image data based on the first and second representative values." Support for claim 20 and the amendments to claim 8 may be found throughout the specification and drawings, e.g., Fig. 4B.

The Office Action rejected claims 1-8 and 10-19 under 35 U.S.C. §102(e) as being anticipated by Chiang et al. (hereinafter "Chiang"), U.S. Patent No. 6,160,846. Applicant respectfully traverses the rejection.

Claim 1 recites broadly the embodiments of the invention disclosed in the specification. In particular, this claim recites compressing/coding image data by "coding the relatively high frequency component independently from the relatively low frequency component." The Chiang patent does not disclose these features.

Chiang discloses system for processing an image using a control loop that includes a DWT coder 606, a DWT coder 612, and a motion compensator coder 604. The DWT coder encodes image data using a wavelet transform, which divides the data into high and low frequency bands. Unlike claim 1, however, the DWT coder does not encode the image data in the high and low frequency bands independently from one another; that is, the Chiang patent does not disclose that relatively high frequency components are coded independently from relatively low frequency components. In fact, Chiang at least implicitly teaches away from these feature when it discloses that all nodes of its wavelet tree are commonly coded. See, for example, column 16, lines 44-52, which provides that either a breadth-first coding technique or a depth-first coding technique is used to code all nodes in its wavelet tree.

Because the Chiang patent does not disclose all the features of claim 1, it is respectfully submitted that the Chiang patent cannot anticipate claim 1 or any of its dependent claims.

Claim 10 recites an image compressing unit which compresses/codes "the relatively high frequency components independently from the relatively low frequency components." As noted above, the Chiang patent does not disclose these features and thus cannot anticipate claim 10 or any of its dependent claims.

New claims 20-27 have been added to the application.

Claim 21 recites an image processing method, comprising dividing received image data into high and low frequency components, allocating predetermined bits to the high and low frequency components, and coding the high frequency components independently from the low frequency components to generate compressed image data. The Chiang patent fails to disclose at least the coding step of this claim.

Claim 22 recites using different coding tables to code the high frequency components and the low frequency components. The Chiang patent does not disclose these features.

Claim 23 recites that the coding step includes outputting an indexed range value from a first coding table corresponding to the high frequency band components, subtracting first low frequency components from second low frequency components to generate a difference value, and outputting an indexed range value from a second coding table corresponding to the difference value. The Chiang patent does not disclose these features.

Claim 24 recites that the compressed image data is formed from the index range value from the first coding table, the index range value from the second coding table, and the first low frequency components. The Chiang patent does not disclose these features.

Claim 26 recites decoding the compressed image data into high and low frequency components and restoring the received image data from the decoded data, wherein the low and high frequency components are decoded independently from one another. The Chiang patent does not disclose this decoding step.

Claim 27 recites that decoding the compressed image data includes outputting an indexed representative value from a first decoding table for the high frequency components; outputting an indexed representative value from a second decoding table for first low frequency components; and adding the indexed representative value from the second decoding table and second low frequency components to generate summed data. The Chiang patent does not disclose these features.

Claim 28 recites that the received image data is restored based on the indexed representative value from the first decoding table, the indexed representative value from the second coding table, and the second low frequency components. The Chiang patent does not disclose these features.

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Reply to Office Action of December 22, 2003

CONCLUSION

In view of the foregoing amendments and remarks, it is respectfully submitted that the application is in condition for allowance. If the Examiner believes that any additional changes would place the application in better condition for allowance, the Examiner is invited to contact the undersigned attorney, Samuel W. Ntiros, at the telephone number listed below. Favorable consideration and prompt allowance are earnestly solicited.

To the extent necessary, a petition for an extension of time under 37 C.F.R. 1.136 is hereby made. Please charge any shortage in fees due in connection with the filing of this, concurrent and future replies, including extension of time fees, to Deposit Account 16-0607 and please credit any excess fees to such deposit account.

Respectfully submitted,
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